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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/762,918	01/22/2004	Simon D. Yeung	LS001	6150

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LOGIC SIGHT, INC.
487 Health Street
Milpitas, CA 95035

EXAMINER	
LE, MIRANDA	

ART UNIT	PAPER NUMBER
2159	

MAIL DATE	DELIVERY MODE
06/09/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/762,918	YEUNG ET AL.	
	Examiner	Art Unit	
	MIRANDA LE	2159	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *31 March 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-22,29-39,46-49,53-57 and 62* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-22,29-39,46-49,53-57 and 62* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

This communication is responsive to Amendment, filed 03/231/09.

Claims 1-22, 29-39, 46-49, 53-57, 62 are pending in this application. This action is made Final.

35 USC § 101

The rejection of claims 1-22, 29-39, 46-49, 53-57, 62 by 35 U.S.C. §101 has been withdrawn in view of the amendment.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the

applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-22, 32-39, 46-50, 52, 54, 57, 59, 60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leisten et al. (US Patent No. 6,023,702), in view of Charisius et al. (US Patent No. 6,938,240).

As per claim 50, Leisten teaches a method for executing a business process *(i.e. Current demands for quality systems imply requirements for synergistic integration of dynamic process and project planning, management and execution of work processes and people performing these tasks in different roles. Each individual user role exercises a different view over the work process, where the different views comprise different, partly overlapping functions over a work process, col. 3, lines 22-27)*, comprising:

obtaining an entity model *(i.e. the application of resources, as building teams, col. 15, lines 50-60)* representative of a person *(i.e. , a unique user-id; team-id, col. 5, lines 25-33)* to which a task *(i.e. Composite tasks have to be refined into simple executable tasks before actual start of task execution. Simple tasks need to be allocated to a unique user-id or team-id. An executable simple task can be allocated to a person or a member of team of persons that can be performing work interchangeably. Only for the reason of simplicity, teams are not discussed within this disclosure. For the same reason, tasks are executed by persons only, not by processors, col. 5, lines 25-33)* associated with said business process can be assigned, wherein said entity model comprises information regarding a work efficiency of said person *(i.e. For each instance of*

applying the building process for building a single house, or a set of houses in one large building project, instances of the project schema 102 are applied that reflect the customization requirements for each instance of building a house, under the constraints of the resources applied to the specific building project, col. 15, lines 50-60);

obtaining a work model *(i.e. A work process object (WPO), col. 3, lines 50-65)* representative of a task to be assigned to said person *(i.e. A work process object (WPO) residing in a data base represents a work process as an integrated concept for process and project management, both for the definition of executable objects and for their eventual execution or interpretation, col. 3, lines 50-65)*;

assigning said task to said person based on said entity model and said work model to thereby carry out said business process *(i.e. For each instance of applying the building process for building a single house, or a set of houses in one large building project, instances of the project schema 102 are applied that reflect the customization requirements for each instance of building a house, under the constraints of the resources applied to the specific building project, col. 15, lines 50-60)*.

wherein said act of assigning said task is performed using a processor *(i.e. Composite tasks have to be refined into simple executable tasks before actual start of task execution. Simple tasks need to be allocated to a unique user-id or team-id. An executable simple task can be allocated to a person or a member of team of persons that can be performing work interchangeably. Only*

for the reason of simplicity, teams are not discussed within this disclosure. For the same reason, tasks are executed by persons only, not by processors, col. 5, lines 25-33), which is configured to transmit a message to said person to instruct said person to perform said task *(i.e. The person receiving a work order must return the information to the system on the acceptance of the work order, as to instruct the project management function about the start of the execution of the task, and has to report back to the system work progress and work termination, included some measurement parameters like total effort spent on a specific task, or reasons for deviation, col. 23, lines 20-36)*.

Although Leisten implicitly teaches "work efficiency" as the constraints of the resources, col. 15, lines 50-60; his professional skills, col. 19, line 51 to col. 20, line 4, Leisten does not seem to fairly state the term.

Charisius, however, teaches an entity model *(i.e. Resource information, col. 28, line 64 to col. 29, line 16, See Fig. 54)* including an entity *(i.e. Joe Developer, See Fig. 54),* wherein said entity model comprises information regarding a work efficiency *(i.e. one or more skill identifiers, or a skill strength, col. 29, lines 17-32)* of said entity *(i.e. Resource information 5404 may also include one or more skill identifiers that indicate one or more capabilities that a task of a plan may require for the task to be completed. Skill identifiers may include any foreseeable skill for the named resource, including a user, equipment, facilities, computer systems, or other known entities that may be assigned to any task of a plan. For example, when the named resource is an enterprise affiliate, the skill identifiers that may be identified for the enterprise*

affiliate may include: "Java programming," "architecture," or "carpentry." When the named resource is equipment, the skill identifiers may include "punch-press," "printing," or "Windows NT Operating System." Or, when the resource is another system, skills may involve the ability to execute specific functions (much like distributed or web services, "credit card validation," "shop for best air freight shipper prices"). Resource information 5404 may also include a skill strength (not shown) for each skill identifier. The skill strength may be used by the tool to differentiate one resource from another resource when matching a resource to a role of a task in a plan, col. 28, line 64 to col. 29, line 16).

It would have been thus obvious to one of ordinary skill of the art having the teaching of Leisten and Charisius at the time the invention was made to modify the system of Leisten to include the limitations as taught by Charisius. One of ordinary skill in the art would be motivated to make this combination in order to have the skill strength may be used by the tool to differentiate one resource from another resource when matching a resource to a role of a task in a plan in view of Charisius (col. 28, line 64 to col. 29, line 16), as doing so would give the added benefit of providing an integrated process modeling and project planning tool that allows an enterprise affiliate to improving a workflow that models a process as taught by Charisius (Abstract).

As per claim 52, Charisius teaches the method of claim 50, wherein said entity model is obtained by selecting an entity template from a plurality of available entity templates *(Fig. 45)*.

Claims 29-31, 62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Charisius et al. (US Patent No. 6,938,240), and further in view of Johnson, Christopher D. et al. (US Pub No. 20040138935).

As per claim 29, Charisius teaches a method for optimizing a business process involving a task *(i.e. to optimize workflow definition file 6800, col. 44, lines 26-42)*, said method comprising:

obtaining data *(i.e. skill 7710 of "MG" resource profile 7704, col. 44, lines 15-25)* regarding a result of a performance of said task *(i.e. In another implementation, the Client Interface 134 may compare a skill of the resource-most-often-assigned (e.g., "MG") to the skills in role profiles other than "Assembler" role profile 7604 in order to identify an optimal role that may be assigned to responsible role 6806 for activity 6801. For example, the Client Interface 134 may compare skill 7710 of "MG" resource profile 7704 to skills 7622 and 7624 of role profiles 7606 and 7608, respecively. In this example, the Client Interface 134 is able to identify that skill 7622 of role profile 7606 matches skill 7624 of role profile 7608 corresponding to "Gopher" role 7620, col. 44, lines 15-25)*; and

comparing *(i.e. compare skill 7710 of "MG" resource profile 7704 to skills 7622 and 7624 of role profiles 7606 and 7608, respectively, col. 44, lines 15-25)* said data *(i.e. skill 7710 of "MG" resource profile 7704, col. 44, lines 15-25)* with data *(i.e. skills 7622 and 7624 of role profiles 7606 and 7608, col. 44, lines 15-25)* regarding a result of a previously performed task *(i.e. In another implementation, the Client Interface 134 may compare a skill of the resource-*

most-often-assigned (e.g., "MG") to the skills in role profiles other than "Assembler" role profile 7604 in order to identify an optimal role that may be assigned to responsible role 6806 for activity 6801. For example, the Client Interface 134 may compare skill 7710 of "MG" resource profile 7704 to skills 7622 and 7624 of role profiles 7606 and 7608, respecively. In this example, the Client Interface 134 is able to identify that skill 7622 of role profile 7606 matches skill 7624 of role profile 7608 corresponding to "Gopher" role 7620, col. 44, lines 15-25);

automatically determining an optimized business process using a processor *(i.e. to identify an optimal role, col. 44, lines 15-25)* based at least on said comparing *(i.e. If it is determined that all plans that have been created from the workflow have been checked, the Client Interface 134 then determines if the maximum percentage for any condition-to-check is exceeded for any activity in the workflow (Step 6732 in FIG. 67B). To determine if the maximum percentage for any condition-to-check is exceeded, the Client Interface 134 calculates a percentage-met for each condition-to-check for each activity in the workflow. The Client Interface 134 calculates each percentage-met by dividing the number of times that each condition-to-check was found true (i.e., value of the condition-to-check counter) by the number of plans checked (i.e., value of plan counter) times one hundred (100). The Client Interface 134 then compares the maximum percentage for each condition-to-check with each calculated percentage-met to determine if any maximum percentage has been exceeded for any activity in the workflow, col. 40, lines 34-50)*; and

storing at least a part of said optimized business process *(i.e. If it is determined that all plans that have been created from the workflow have been checked, the Client Interface 134 then determines if the maximum percentage for any condition-to-check is exceeded for any activity in the workflow (Step 6732 in FIG. 67B). To determine if the maximum percentage for any condition-to-check is exceeded, the Client Interface 134 calculates a percentage-met for each condition-to-check for each activity in the workflow. The Client Interface 134 calculates each percentage-met by dividing the number of times that each condition-to-check was found true (i.e., value of the condition-to-check counter) by the number of plans checked (i.e., value of plan counter) times one hundred (100). The Client Interface 134 then compares the maximum percentage for each condition-to-check with each calculated percentage-met to determine if any maximum percentage has been exceeded for any activity in the workflow, col. 40, lines 34-50)*.

Charisius implicitly teaches “a result of a previously performed task” as a skill of the resource-most-often-assigned, col. 44, lines 15-25.

Charisius does not explicitly state “a result of a previously performed task”.

Johnson teaches this limitation in [0122] *(i.e. [0122] Step 616 entails analyzing the output of the post-processing step 614 to determine whether the output result satisfies various criteria. For instance, step 616 can entail comparing the output result with predetermined threshold values, or comparing a current output result with a previous output result provided in a previous iteration of the loop shown in the what-if/do-what series of steps 604. Based on the*

determination made in step 616, the process 600 may decide that a satisfactory result has not been achieved by the digital cockpit 104. In this case, the process 600 returns to step 610, where a different permutation of input assumptions is selected, followed by a repetition of steps 612, 614, and 616. This thus-defined loop is repeated until step 616 determines that one or more satisfactory results have been generated by the process 600 (e.g., as reflected by the result satisfying various predetermined criteria). Described in more general terms, the loop defined by steps 610, 612, 614, and 616 seeks to determine the "best" permutation of input knob settings, where "best" is determined by a predetermined criterion).

It would have been obvious to one of ordinary skill of the art having the teaching of Charisius and Johnson at the time the invention was made to modify the system of Charisius to include the limitations as taught by Johnson. One of ordinary skill in the art would be motivated to make this combination in order to compare a current output result with a previous output result in view of Johnson, as doing so would give the added benefit of providing a method that is described for visualizing a probabilistic output result generated by a business information and decision control system for a business including multiple interrelated business processes as taught by Johnson ([0007]).

As per claim 30, Charisius, as combined, teaches the method of claim 29, wherein said data regarding the result of the performance of said task is selected form the group consisting of cost performing said task *(i.e. The tool 200*

stores the role profiles in association with the selected workflow activity on WebDAV Storage 142. The tool 200 saves significant costs in developing multiple workflows by allowing the enterprise affiliate to store the role profiles in association with the selected workflow activity on WebDAV Storage 142 so that the role profiles may be available for the enterprise affiliate to assign to an activity of another workflow that is also related to the selected workflow activity, col. 20, lines 27-45), time required to perform said task, and number of persons involved in performing said task *(i.e. Returning to FIG. 3, the next step performed by the tool is to create a plan from the workflow (step 306). Each activity in the default path of the workflow generally corresponds to a task in the plan. The task identifies the scheduled start and stop times for the task. The tool then displays the plan (step 308). For example, the plan created from the workflow 400 depicted in FIG. 4 is shown in FIG. 7. The plan 700 includes two tasks 702 and 704 that correspond to the two activities 406 and 408 from the workflow 400. The first task 702 is scheduled to begin at 9 a.m. 706 on Aug. 1, 2001 (not shown), and end at 6 p.m. 708 on the same day. The second task 704 is scheduled to begin at 9 a.m. 710 on Aug. 2, 2001 (712) and end at 5 p.m. 714 on the same day, col. 15, lines 23-36)*.

As per claim 31, Charisius, as combined, teaches the method of claim 29, wherein said automatically determining is performed using a software or a device *(i.e. If it is determined that all plans that have been created from the workflow have been checked, the Client Interface 134 then determines if the*

maximum percentage for any condition-to-check is exceeded for any activity in the workflow (Step 6732 in FIG. 67B). To determine if the maximum percentage for any condition-to-check is exceeded, the Client Interface 134 calculates a percentage-met for each condition-to-check for each activity in the workflow. The Client Interface 134 calculates each percentage-met by dividing the number of times that each condition-to-check was found true (i.e., value of the condition-to-check counter) by the number of plans checked (i.e., value of plan counter) times one hundred (100). The Client Interface 134 then compares the maximum percentage for each condition-to-check with each calculated percentage-met to determine if any maximum percentage has been exceeded for any activity in the workflow, col. 40, lines 34-50).

As per claim 62, Charisius, as combined, teaches the method of claim 29, wherein said business process comprises one or more tasks desired to be performed by one or more entities *(i.e. Returning to FIG. 3, the next step performed by the tool is to create a plan from the workflow (step 306). Each activity in the default path of the workflow generally corresponds to a task in the plan. The task identifies the scheduled start and stop times for the task. The tool then displays the plan (step 308). For example, the plan created from the workflow 400 depicted in FIG. 4 is shown in FIG. 7. The plan 700 includes two tasks 702 and 704 that correspond to the two activities 406 and 408 from the workflow 400. The first task 702 is scheduled to begin at 9 a.m. 706 on Aug. 1, 2001 (not shown), and end at 6 p.m. 708 on the same day. The second task 704*

is scheduled to begin at 9 a.m. 710 on Aug. 2, 2001 (712) and end at 5 p.m. 714 on the same day, col. 15, lines 23-36).

Claims 1-22, 32-39, 46-49, 53-61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leisten et al. (US Patent No. 6,023,702), in view of Johnson, Christopher D. et al. (US Pub No. 20040138935).

As per claim 1, Leisten teaches a method for executing a business process *(i.e. management and execution of work processes and people performing these tasks in different roles, col. 3, lines 22-27)*, comprising:

obtaining an entity model *(i.e. the application of resources, as building teams, col. 15, lines 50-60)* representative of an entity *(i.e. a unique user-id; team-id, col. 5, lines 25-33)* to which task *(i.e. Composite tasks have to be refined into simple executable tasks before actual start of task execution. Simple tasks need to be allocated to a unique user-id or team-id, col. 5, lines 25-33; people performing these tasks in different roles. Each individual user role exercises a different view over the work process, where the different views comprise different, partly overlapping functions over a work process, col. 3, lines 22-27)* associated with said business process can be assigned *(i.e. For each instance of applying the building process for building a single house, or a set of houses in one large building project, instances of the project schema 102 are applied that reflect the customization requirements for each instance of building a house, under the constraints of the resources applied to the specific building project, col. 15, lines 50-60)*, wherein said entity model comprises information

regarding a work efficiency of said entity *(i.e. Composite tasks have to be refined into simple executable tasks before actual start of task execution. Simple tasks need to be allocated to a unique user-id or team-id. An executable simple task can be allocated to a person or a member of team of persons that can be performing work interchangeably. Only for the reason of simplicity, teams are not discussed within this disclosure. For the same reason, tasks are executed by persons only, not by processors, col. 5, lines 25-33)*;

obtaining a work model *(i.e. A work process object (WPO), col. 3, lines 50-65)* representative of a task to be assigned to said entity *(i.e. A work process object (WPO) residing in a data base represents a work process as an integrated concept for process and project management, both for the definition of executable objects and for their eventual execution or interpretation, col. 3, lines 50-65)*; and

assigning said task using a processor to said entity based on said entity model and said work model to thereby carry out said business process *(i.e. For each instance of applying the building process for building a single house, or a set of houses in one large building project, instances of the project schema 102 are applied that reflect the customization requirements for each instance of building a house, under the constraints of the resources applied to the specific building project, col. 15, lines 50-60)*.

storing said task *(i.e. A work process object (WPO) residing in a data base represents a work process as an integrated concept for process and project*

management, both for the definition of executable objects and for their eventual execution or interpretation, col. 3, lines 50-65).

Leisten implicitly teaches "work efficiency" as the constraints of the resources, col. 15, lines 50-60; his professional skills, col. 19, line 51 to col. 20, line 4.

Leisten does not clearly state this limitation.

Johnson teaches this limitation in [0122] *(i.e. [0122] Step 616 entails analyzing the output of the post-processing step 614 to determine whether the output result satisfies various criteria. For instance, step 616 can entail comparing the output result with predetermined threshold values, or comparing a current output result with a previous output result provided in a previous iteration of the loop shown in the what-if/do-what series of steps 604. Based on the determination made in step 616, the process 600 may decide that a satisfactory result has not been achieved by the digital cockpit 104. In this case, the process 600 returns to step 610, where a different permutation of input assumptions is selected, followed by a repetition of steps 612, 614, and 616. This thus-defined loop is repeated until step 616 determines that one or more satisfactory results have been generated by the process 600 (e.g., as reflected by the result satisfying various predetermined criteria). Described in more general terms, the loop defined by steps 610, 612, 614, and 616 seeks to determine the "best" permutation of input knob settings, where "best" is determined by a predetermined criterion).*

It would have been obvious to one of ordinary skill of the art having the teaching of Leisten and Johnson at the time the invention was made to modify the system of Leisten to include the limitations as taught by Johnson. One of ordinary skill in the art would be motivated to make this combination in order to *compare a current output result with a previous output result* in view of Johnson, as doing so would give the added benefit of providing a method that is described for visualizing a probabilistic output result generated by a business information and decision control system for a business including multiple interrelated business processes as taught by Johnson ([0007]).

As per claim 32, Leisten teaches a computer product having a computer-readable volatile or non-volatile medium for storing a set of instructions *(i.e. Current demands for quality systems imply requirements for synergistic integration of dynamic process and project planning, management and execution of work processes and people performing these tasks in different roles. Each individual user role exercises a different view over the work process, where the different views comprise different, partly overlapping functions over a work process, col. 3, lines 22-27)*, the execution of which by a processor causes a process to be performed, the process comprising providing an entity template *(i.e. the application of resources, as building teams, col. 15, lines 50-60)* representative of an entity *(i.e. a unique user-id; team-id, col. 5, lines 25-33)* to which a task *(i.e. Composite tasks have to be refined into simple executable tasks before actual start of task execution. Simple tasks need to be allocated to a*

unique user-id or team-id. An executable simple task can be allocated to a person or a member of team of persons that can be performing work interchangeably. Only for the reason of simplicity, teams are not discussed within this disclosure. For the same reason, tasks are executed by persons only, not by processors, col. 5, lines 25-33) associated with a business process can be assigned *(i.e. Composite tasks have to be refined into simple executable tasks before actual start of task execution. Simple tasks need to be allocated to a unique user-id or team-id. An executable simple task can be allocated to a person or a member of team of persons that can be performing work interchangeably. Only for the reason of simplicity, teams are not discussed within this disclosure. For the same reason, tasks are executed by persons only, not by processors, col. 5, lines 25-33)*, wherein said entity template comprises information regarding a work efficiency of said entity *(i.e. For each instance of applying the building process for building a single house, or a set of houses in one large building project, instances of the project schema 102 are applied that reflect the customization requirements for each instance of building a house, under the constraints of the resources applied to the specific building project, col. 15, lines 50-60)*.

Leisten implicitly teaches “work efficiency” as the constraints of the resources, col. 15, lines 50-60; his professional skills, col. 19, line 51 to col. 20, line 4.

Leisten does not clearly state this limitation.

Johnson teaches this limitation in [0122] *(i.e. [0122] Step 616 entails analyzing the output of the post-processing step 614 to determine whether the output result satisfies various criteria. For instance, step 616 can entail comparing the output result with predetermined threshold values, or comparing a current output result with a previous output result provided in a previous iteration of the loop shown in the what-if/do-what series of steps 604. Based on the determination made in step 616, the process 600 may decide that a satisfactory result has not been achieved by the digital cockpit 104. In this case, the process 600 returns to step 610, where a different permutation of input assumptions is selected, followed by a repetition of steps 612, 614, and 616. This thus-defined loop is repeated until step 616 determines that one or more satisfactory results have been generated by the process 600 (e.g., as reflected by the result satisfying various predetermined criteria). Described in more general terms, the loop defined by steps 610, 612, 614, and 616 seeks to determine the "best" permutation of input knob settings, where "best" is determined by a predetermined criterion)*.

It would have been obvious to one of ordinary skill of the art having the teaching of Leisten and Johnson at the time the invention was made to modify the system of Leisten to include the limitations as taught by Johnson. One of ordinary skill in the art would be motivated to make this combination in order to *compare a current output result with a previous output result* in view of Johnson, as doing so would give the added benefit of providing a method that is described for visualizing a probabilistic output result generated by a business information

and decision control system for a business including multiple interrelated business processes as taught by Johnson ([0007]).

As per claim 36, Leisten teaches a computer product having a computer-readable volatile or non-volatile medium for storing a set of instructions *(i.e. Current demands for quality systems imply requirements for synergistic integration of dynamic process and project planning, management and execution of work processes and people performing these tasks in different roles. Each individual user role exercises a different view over the work process, where the different views comprise different, partly overlapping functions over a work process, col. 3, lines 22-27)*, the execution of which causes a process to be performed, said process comprising providing a user interface for allowing a user to create an entity model *(i.e. the application of resources, as building teams, col. 15, lines 50-60)* representative of an entity *(i.e. a unique user-id; team-id, col. 5, lines 25-33)* to which a task *(i.e. Composite tasks have to be refined into simple executable tasks before actual start of task execution. Simple tasks need to be allocated to a unique user-id or team-id. An executable simple task can be allocated to a person or a member of team of persons that can be performing work interchangeably. Only for the reason of simplicity, teams are not discussed within this disclosure. For the same reason, tasks are executed by persons only, not by processors, col. 5, lines 25-33)* associated with a business process can be assigned, wherein said entity model comprises information regarding a work efficiency of said entity *(i.e. For each instance of applying the building process for*

building a single house, or a set of houses in one large building project, instances of the project schema 102 are applied that reflect the customization requirements for each instance of building a house, under the constraints of the resources applied to the specific building project, col. 15, lines 50-60).

Leisten implicitly teaches "work efficiency" as the constraints of the resources, col. 15, lines 50-60; his professional skills, col. 19, line 51 to col. 20, line 4.

Leisten does not clearly state this limitation.

Johnson teaches this limitation in [0122] *(i.e. [0122] Step 616 entails analyzing the output of the post-processing step 614 to determine whether the output result satisfies various criteria. For instance, step 616 can entail comparing the output result with predetermined threshold values, or comparing a current output result with a previous output result provided in a previous iteration of the loop shown in the what-if/do-what series of steps 604. Based on the determination made in step 616, the process 600 may decide that a satisfactory result has not been achieved by the digital cockpit 104. In this case, the process 600 returns to step 610, where a different permutation of input assumptions is selected, followed by a repetition of steps 612, 614, and 616. This thus-defined loop is repeated until step 616 determines that one or more satisfactory results have been generated by the process 600 (e.g., as reflected by the result satisfying various predetermined criteria). Described in more general terms, the loop defined by steps 610, 612, 614, and 616 seeks to determine the "best"*

permutation of input knob settings, where "best" is determined by a predetermined criterion).

It would have been obvious to one of ordinary skill of the art having the teaching of Leisten and Johnson at the time the invention was made to modify the system of Leisten to include the limitations as taught by Johnson. One of ordinary skill in the art would be motivated to make this combination in order to *compare a current output result with a previous output result* in view of Johnson, as doing so would give the added benefit of providing a method that is described for visualizing a probabilistic output result generated by a business information and decision control system for a business including multiple interrelated business processes as taught by Johnson ([0007]).

As per claim 46, Leisten teaches a computer-implemented system for business process automation *(i.e. Current demands for quality systems imply requirements for synergistic integration of dynamic process and project planning, management and execution of work processes and people performing these tasks in different roles. Each individual user role exercises a different view over the work process, where the different views comprise different, partly overlapping functions over a work process, col. 3, lines 22-27)* and optimization, comprising:

a business process creation module that includes a processor, wherein said business process creation module is configured for allowing a user to create an entity model *(i.e. the application of resources, as building teams, col. 15, lines 50-60)* and a business process model that represents a business process, said

business process model having one or more work steps *(i.e. For each instance of applying the building process for building a single house, or a set of houses in one large building project, instances of the project schema 102 are applied that reflect the customization requirements for each instance of building a house, under the constraints of the resources applied to the specific building project, col. 15, lines 50-60)*, wherein said entity model represents an entity *(i.e. a unique user-id; team-id, col. 5, lines 25-33)* to which a task associated with said business process can be assigned, said entity model comprising information regarding a work efficiency of said entity *(i.e. Composite tasks have to be refined into simple executable tasks before actual start of task execution. Simple tasks need to be allocated to a unique user-id or team-id. An executable simple task can be allocated to a person or a member of team of persons that can be performing work interchangeably. Only for the reason of simplicity, teams are not discussed within this disclosure. For the same reason, tasks are executed by persons only, not by processors, col. 5, lines 25-33)*; and

a business process execution and monitoring module configured to assign one or more tasks *(i.e. Composite tasks have to be refined into simple executable tasks before actual start of task execution. Simple tasks need to be allocated to a unique user-id or team-id. An executable simple task can be allocated to a person or a member of team of persons that can be performing work interchangeably. Only for the reason of simplicity, teams are not discussed within this disclosure. For the same reason, tasks are executed by persons only, not by processors, col. 5, lines 25-33)* to one or more entities based on said

business process model *(i.e. A work process object (WPO) (1001) is created, residing in a data base, and stored in a memory of the process and project management computer system (1030). All data concerning the process and project management are reported to said work process object (WPO) (1001) and said work process object (WPO) (1001) is used as a common data base, Abstract)*.

Leisten implicitly teaches "work efficiency" as the constraints of the resources, col. 15, lines 50-60; his professional skills, col. 19, line 51 to col. 20, line 4.

Leisten does not clearly state this limitation.

Johnson teaches this limitation in [0122] *(i.e. [0122] Step 616 entails analyzing the output of the post-processing step 614 to determine whether the output result satisfies various criteria. For instance, step 616 can entail comparing the output result with predetermined threshold values, or comparing a current output result with a previous output result provided in a previous iteration of the loop shown in the what-if/do-what series of steps 604. Based on the determination made in step 616, the process 600 may decide that a satisfactory result has not been achieved by the digital cockpit 104. In this case, the process 600 returns to step 610, where a different permutation of input assumptions is selected, followed by a repetition of steps 612, 614, and 616. This thus-defined loop is repeated until step 616 determines that one or more satisfactory results have been generated by the process 600 (e.g., as reflected by the result satisfying various predetermined criteria). Described in more general terms, the*

loop defined by steps 610, 612, 614, and 616 seeks to determine the "best" permutation of input knob settings, where "best" is determined by a predetermined criterion).

It would have been obvious to one of ordinary skill of the art having the teaching of Leisten and Johnson at the time the invention was made to modify the system of Leisten to include the limitations as taught by Johnson. One of ordinary skill in the art would be motivated to make this combination in order to *compare a current output result with a previous output result* in view of Johnson, as doing so would give the added benefit of providing a method that is described for visualizing a probabilistic output result generated by a business information and decision control system for a business including multiple interrelated business processes as taught by Johnson ([0007]).

As per claim 53, Leisten teaches a method for executing a business process *(i.e. Current demands for quality systems imply requirements for synergistic integration of dynamic process and project planning, management and execution of work processes and people performing these tasks in different roles. Each individual user role exercises a different view over the work process, where the different views comprise different, partly overlapping functions over a work process, col. 3, lines 22-27)*, comprising:

obtaining an entity model *(i.e. the application of resources, as building teams, col. 15, lines 50-60)* representative of an entity *(i.e. a unique user-id; team-id, col. 5, lines 25-33)* to which a task associated with said business

process can be assigned *(i.e. For each instance of applying the building process for building a single house, or a set of houses in one large building project, instances of the project schema 102 are applied that reflect the customization requirements for each instance of building a house, under the constraints of the resources applied to the specific building project, col. 15, lines 50-60)*;

obtaining a work model *(i.e. A work process object (WPO), col. 3, lines 50-65)* representative of a task to be assigned to said entity *(i.e. A work process object (WPO) residing in a data base represents a work process as an integrated concept for process and project management, both for the definition of executable objects and for their eventual execution or interpretation, col. 3, lines 50-65)*;

assigning said task to said entity based on said entity model and said work model to thereby carry out said business process *(i.e. For each instance of applying the building process for building a single house, or a set of houses in one large building project, instances of the project schema 102 are applied that reflect the customization requirements for each instance of building a house, under the constraints of the resources applied to the specific building project, col. 15, lines 50-60)*;

receiving information regarding a result of an activity performed by said entity *(i.e. This is the case in the current example for all planning and monitoring activities where the result is directly entered into the work process object (WPO), col. 23, lines 20-36);*

proposing a change using a processor *(i.e. It is advantageous that one dynamically changing work process object (WPO) represents a work process at its various points of definition and execution, and that several well defined views support the mapping between the stages of the work process object (WPO), col. 5, lines 1-11)* in said business process based on said information, thereby allowing a user to accept the change; and *(i.e. Parallel to the batch schedule assignment an assignment log is generated which can be used to reset all changes that follow the first detected inconsistency, col. 12, lines 50-57)*; and

storing said proposed change *(i.e. It is advantageous that one dynamically changing work process object (WPO) represents a work process at its various points of definition and execution, and that several well defined views support the mapping between the stages of the work process object (WPO), col. 5, lines 1-11)*.

Leisten implicitly teaches “proposed change” in col. 5, lines 1-11.

Leisten does not clearly state “proposed change”.

Johnson teaches this limitation in [0107] (i.e. [0007] According to one exemplary implementation, a method is described for visualizing a probabilistic output result generated by a business information and decisioning control system for a business including multiple interrelated business processes. The method includes: (a) performing analysis using a business model provided by the business information and decisioning control system to generate a probabilistic output result, the probabilistic output result having confidence information associated therewith; (b) presenting the probabilistic output result and the

associated confidence information to the user via a business system user interface of the business information and decisioning control system; and (c) receiving the user's selection of a command via the business system user interface, where the command prompts at least one of the interrelated business processes to make a change in the at least one of the interrelated business processes. The user chooses the command based on an analysis of both the probabilistic output result and its associated confidence information).

It would have been obvious to one of ordinary skill of the art having the teaching of Leisten and Johnson at the time the invention was made to modify the system of Leisten to include the limitations as taught by Johnson. One of ordinary skill in the art would be motivated to make this combination in order to make a change in the at least one of the interrelated business processes in view of Johnson, as doing so would give the added benefit of providing a method that is described for visualizing a probabilistic output result generated by a business information and decision control system for a business including multiple interrelated business processes as taught by Johnson ([0007]).

As per claim 58, Leisten teaches a system for executing a business process *(i.e. Current demands for quality systems imply requirements for synergistic integration of dynamic process and project planning, management and execution of work processes and people performing these tasks in different roles. Each individual user role exercises a different view over the work process,*

where the different views comprise different, partly overlapping functions over a work process, col. 3, lines 22-27), comprising a processor that is configured for:

obtaining an entity model *(i.e. the application of resources, as building teams, col. 15, lines 50-60)* representative of an entity *(i.e. , a unique user-id; team-id, col. 5, lines 25-33)* to which a task associated with said business process can be assigned *(i.e. Composite tasks have to be refined into simple executable tasks before actual start of task execution. Simple tasks need to be allocated to a unique user-id or team-id. An executable simple task can be allocated to a person or a member of team of persons that can be performing work interchangeably. Only for the reason of simplicity, teams are not discussed within this disclosure. For the same reason, tasks are executed by persons only, not by processors, col. 5, lines 25-33)*;

obtaining a work model *(i.e. A work process object (WPO), col. 3, lines 50-65)* representative of a task to be assigned to said entity *(i.e. A work process object (WPO) residing in a data base represents a work process as an integrated concept for process and project management, both for the definition of executable objects and for their eventual execution or interpretation, col. 3, lines 50-65)*;

assigning said task to said entity based on said entity model and said work model to thereby carry out said business process *(i.e. For each instance of applying the building process for building a single house, or a set of houses in one large building project, instances of the project schema 102 are applied that reflect the customization requirements for each instance of building a house,*

under the constraints of the resources applied to the specific building project, col. 15, lines 50-60); and

receiving information regarding a result of an activity performed by said entity *(i.e. This is the case in the current example for all planning and monitoring activities where the result is directly entered into the work process object (WPO), col. 23, lines 20-36);*

proposing a change *(i.e. It is advantageous that one dynamically changing work process object (WPO) represents a work process at its various points of definition and execution, and that several well defined views support the mapping between the stages of the work process object (WPO), col. 5, lines 1-11)* in said business process based on said information *(i.e. Parallel to the batch schedule assignment an assignment log is generated which can be used to reset all changes that follow the first detected inconsistency, col. 12, lines 50-57)*, thereby allowing a user an opportunity to accept the change.

Leisten implicitly teaches “proposed change” in col. 5, lines 1-11.

Leisten does not clearly state “proposed change”.

Johnson teaches this limitation in [0107] *(i.e. [0007] According to one exemplary implementation, a method is described for visualizing a probabilistic output result generated by a business information and decisioning control system for a business including multiple interrelated business processes. The method includes: (a) performing analysis using a business model provided by the business information and decisioning control system to generate a probabilistic output result, the probabilistic output result having confidence information*

associated therewith; (b) presenting the probabilistic output result and the associated confidence information to the user via a business system user interface of the business information and decisioning control system; and (c) receiving the user's selection of a command via the business system user interface, where the command prompts at least one of the interrelated business processes to make a change in the at least one of the interrelated business processes. The user chooses the command based on an analysis of both the probabilistic output result and its associated confidence information).

It would have been obvious to one of ordinary skill of the art having the teaching of Leisten and Johnson at the time the invention was made to modify the system of Leisten to include the limitations as taught by Johnson. One of ordinary skill in the art would be motivated to make this combination in order to make a change in the at least one of the interrelated business processes in view of Johnson, as doing so would give the added benefit of providing a method that is described for visualizing a probabilistic output result generated by a business information and decision control system for a business including multiple interrelated business processes as taught by Johnson ([0007]).

As per claim 55, Leisten, as combined, teaches the method of claim 53, wherein said act of proposing said change is performed by a processor *(i.e. It is advantageous that one dynamically changing work process object (WPO) represents a work process at its various points of definition and execution, and*

that several well defined views support the mapping between the stages of the work process object (WPO), col. 5, lines 1-11)

As per claim 56, Leisten, as combined, teaches the method of claim 53, wherein said act of assigning is performed by a processor, which is configured to transmit a message to said entity to perform said task *(i.e. The person receiving a work order must return the information to the system on the acceptance of the work order, as to instruct the project management function about the start of the execution of the task, and has to report back to the system work progress and work termination, included some measurement parameters like total effort spent on a specific task, or reasons for deviation, col. 23, lines 20-36)*.

As per claim 61, Leisten, as combined, teaches the system of claim 58, wherein said processor is configured for assigning said task by sending message to said entity to instruct said entity to perform said task *(i.e. This is the case in the current example for all planning and monitoring activities where the result is directly entered into the work process object (WPO). But many of the activities in the current example relate to manual work. The instruction about tasks and activities and all their execution attributes will be handed to the executing persons in the form of a work order, for example in a printed form. The person receiving a work order must return the information to the system on the acceptance of the work order, as to instruct the project management function about the start of the execution of the task, and has to report back to the system*

work progress and work termination, included some measurement parameters like total effort spent on a specific task, or reasons for deviation, col. 23, lines 20-36).

As to claims 2, 35, 39, 49, Johnson, as combined, teaches said entity is selected form the group consisting of a person, a group of persons, a machine, a device, a software, a company, an association, and a country *(i.e. [0007] According to one exemplary implementation, a method is described for visualizing a probabilistic output result generated by a business information and decisioning control system for a business including multiple interrelated business processes. The method includes: (a) performing analysis using a business model provided by the business information and decisioning control system to generate a probabilistic output result, the probabilistic output result having confidence information associated therewith; (b) presenting the probabilistic output result and the associated confidence information to the user via a business system user interface of the business information and decisioning control system; and (c) receiving the user's selection of a command via the business system user interface, where the command prompts at least one of the interrelated business processes to make a change in the at least one of the interrelated business processes. The user chooses the command based on an analysis of both the probabilistic output result and its associated confidence information)*.

As per claim 3, Johnson, as combined, teaches the method of claim 1, wherein said entity model is obtained by selecting an entity template form a

plurality of available entity templates, each of said plurality of available entity templates associated with an entity to which a task can be assigned *(i.e. [0007] According to one exemplary implementation, a method is described for visualizing a probabilistic output result generated by a business information and decisioning control system for a business including multiple interrelated business processes. The method includes: (a) performing analysis using a business model provided by the business information and decisioning control system to generate a probabilistic output result, the probabilistic output result having confidence information associated therewith; (b) presenting the probabilistic output result and the associated confidence information to the user via a business system user interface of the business information and decisioning control system; and (c) receiving the user's selection of a command via the business system user interface, where the command prompts at least one of the interrelated business processes to make a change in the at least one of the interrelated business processes. The user chooses the command based on an analysis of both the probabilistic output result and its associated confidence information)*.

As per claim 4, Johnson, as combined, teaches the method of claim 1, wherein said entity model is obtained by creating said entity model *(i.e. [0007] According to one exemplary implementation, a method is described for visualizing a probabilistic output result generated by a business information and decisioning control system for a business including multiple interrelated business processes. The method includes: (a) performing analysis using a business model*

provided by the business information and decisioning control system to generate a probabilistic output result, the probabilistic output result having confidence information associated therewith; (b) presenting the probabilistic output result and the associated confidence information to the user via a business system user interface of the business information and decisioning control system; and (c) receiving the user's selection of a command via the business system user interface, where the command prompts at least one of the interrelated business processes to make a change in the at least one of the interrelated business processes. The user chooses the command based on an analysis of both the probabilistic output result and its associated confidence information).

As per claim 5, Johnson, as combined, teaches the method of claim 4, wherein said creating includes generating a record, assigning an entity identification to the record, and inputting an attribute to the record, said attribute representative of a characteristic of said entity *(i.e. [0007] According to one exemplary implementation, a method is described for visualizing a probabilistic output result generated by a business information and decisioning control system for a business including multiple interrelated business processes. The method includes: (a) performing analysis using a business model provided by the business information and decisioning control system to generate a probabilistic output result, the probabilistic output result having confidence information associated therewith; (b) presenting the probabilistic output result and the associated confidence information to the user via a business system user*

interface of the business information and decisioning control system; and (c) receiving the user's selection of a command via the business system user interface, where the command prompts at least one of the interrelated business processes to make a change in the at least one of the interrelated business processes. The user chooses the command based on an analysis of both the probabilistic output result and its associated confidence information).

As per claim 6, Johnson, as combined, teaches the method of claim 1, wherein said entity model is obtained by retrieving said entity model from a database *(i.e. [0007] According to one exemplary implementation, a method is described for visualizing a probabilistic output result generated by a business information and decisioning control system for a business including multiple interrelated business processes. The method includes: (a) performing analysis using a business model provided by the business information and decisioning control system to generate a probabilistic output result, the probabilistic output result having confidence information associated therewith; (b) presenting the probabilistic output result and the associated confidence information to the user via a business system user interface of the business information and decisioning control system; and (c) receiving the user's selection of a command via the business system user interface, where the command prompts at least one of the interrelated business processes to make a change in the at least one of the interrelated business processes. The user chooses the command based on an*

analysis of both the probabilistic output result and its associated confidence information).

As per claim 7, Leisten, as combined, teaches the method of claim 1, wherein said work model is obtained by selecting a task template form a plurality of available task templates, each of said plurality of task templates associated with a task that can be assigned to an entity *(i.e. A work process object (WPO) residing in a data base represents a work process as an integrated concept for process and project management, both for the definition of executable objects and for their eventual execution or interpretation, col. 3, lines 50-65)*.

As per claim 8, Leisten, as combined, teaches the method of claim 7, wherein each of the available task templates includes an instruction for performing a task *(i.e. A work process object (WPO) residing in a data base represents a work process as an integrated concept for process and project management, both for the definition of executable objects and for their eventual execution or interpretation, col. 3, lines 50-65)*.

As per claim 9, Leisten, as combined, teaches the method of claim 1, wherein said work model *(i.e. A work process object (WPO))* is obtained by creating said work model *(i.e. A work process object (WPO) (1001) is created, residing in a data base, and stored in a memory of the process and project management computer system (1030). All data concerning the process and*

project management are reported to said work process object (WPO) (1001) and said work process object (WPO) (1001) is used as a common data base, Abstract).

As per claim 10, Leisten, as combined, teaches the method of claim 9, wherein said creating comprises inputting one or more tasks to be performed by an entity *(i.e. The present invention discloses a work process object (WPO) recording all data from the process schema through the execution of the last task in a project. The work process object (WPO) has the conceptual basic structure of a directed graph, built from activity nodes, linked by control connectors, splits, and joins. Within this work process object (WPO) a number of sub-objects may be created that are related to individual attributes of activities in the graph. The architecture of these work process objects and some of the rules and procedures for their dynamic behaviour represent the inventive aspects in the present application, col. 7, line 61 to col. 8, line 4)*.

As per claim 11, Leisten, as combined, teaches the method of claim 9, wherein said creating comprises inputting an instruction for performing a task *(i.e. The present invention discloses a work process object (WPO) recording all data from the process schema through the execution of the last task in a project. The work process object (WPO) has the conceptual basic structure of a directed graph, built from activity nodes, linked by control connectors, splits, and joins. Within this work process object (WPO) a number of sub-objects may be created*

that are related to individual attributes of activities in the graph. The architecture of these work process objects and some of the rules and procedures for their dynamic behaviour represent the inventive aspects in the present application, col. 7, line 61 to col. 8, line 4).

As per claim 12, Leisten, as combined, teaches the method of claim 11, wherein said work model is obtained by retrieving said work model from a data base *(i.e. A work process object (WPO) (1001) is created, residing in a data base, and stored in a memory of the process and project management computer system (1030). All data concerning the process and project management are reported to said work process object (WPO) (1001) and said work process object (WPO) (1001) is used as a common data base, Abstract).*

As per claim 13, Leisten, as combined, teaches the method of claim 1, further comprising creating a business process model using said entity model *(i.e. people performing these tasks in different roles. Each individual user role exercises a different view over the work process, where the different views comprise different, partly overlapping functions over a work process, col. 3, lines 22-27)* and said work model *(i.e. The present invention discloses a work process object (WPO) recording all data from the process schema through the execution of the last task in a project. The work process object (WPO) has the conceptual basic structure of a directed graph, built from activity nodes, linked by control connectors, splits, and joins. Within this work process object (WPO) a number of*

sub-objects may be created that are related to individual attributes of activities in the graph. The architecture of these work process objects and some of the rules and procedures for their dynamic behaviour represent the inventive aspects in the present application, col. 7, line 61 to col. 8, line 4).

As per claim 14, Leisten, as combined, teaches the method of claim 13, wherein said creating business process model comprises constructing a flow chart, said flow chart having at least one work step *(i.e. The present invention discloses a work process object (WPO) recording all data from the process schema through the execution of the last task in a project. The work process object (WPO) has the conceptual basic structure of a directed graph, built from activity nodes, linked by control connectors, splits, and joins. Within this work process object (WPO) a number of sub-objects may be created that are related to individual attributes of activities in the graph. The architecture of these work process objects and some of the rules and procedures for their dynamic behaviour represent the inventive aspects in the present application, col. 7, line 61 to col. 8, line 4)*.

As per claim 15, Leisten, as combined, teaches the method of claim 14, wherein said at least one work step represents said task that is to be assigned to said entity *(i.e. The present invention discloses a work process object (WPO) recording all data from the process schema through the execution of the last task in a project. The work process object (WPO) has the conceptual basic structure*

of a directed graph, built from activity nodes, linked by control connectors, splits, and joins. Within this work process object (WPO) a number of sub-objects may be created that are related to individual attributes of activities in the graph. The architecture of these work process objects and some of the rules and procedures for their dynamic behaviour represent the inventive aspects in the present application, col. 7, line 61 to col. 8, line 4).

As per claim 16, Leisten, as combined, teaches the method of claim 1, wherein said assigning is performed by a software of a human *(i.e. Composite tasks have to be refined into simple executable tasks before actual start of task execution. Simple tasks need to be allocated to a unique user-id or team-id, col. 5, lines 25-33; people performing these tasks in different roles. Each individual user role exercises a different view over the work process, where the different views comprise different, partly overlapping functions over a work process, col. 3, lines 22-27)*.

As per claim 17, Johnson, as combined, teaches the method of claim 1, further comprising collecting data associated with work performed by said entity *(i.e. [0007] According to one exemplary implementation, a method is described for visualizing a probabilistic output result generated by a business information and decisioning control system for a business including multiple interrelated business processes. The method includes: (a) performing analysis using a business model provided by the business information and decisioning control*

system to generate a probabilistic output result, the probabilistic output result having confidence information associated therewith; (b) presenting the probabilistic output result and the associated confidence information to the user via a business system user interface of the business information and decisioning control system; and (c) receiving the user's selection of a command via the business system user interface, where the command prompts at least one of the interrelated business processes to make a change in the at least one of the interrelated business processes. The user chooses the command based on an analysis of both the probabilistic output result and its associated confidence information).

As per claim 18, Johnson, as combined, teaches the method of claim 17, further comprising comparing said data with data associated with a previously created business process *(i.e. [0007] According to one exemplary implementation, a method is described for visualizing a probabilistic output result generated by a business information and decisioning control system for a business including multiple interrelated business processes. The method includes: (a) performing analysis using a business model provided by the business information and decisioning control system to generate a probabilistic output result, the probabilistic output result having confidence information associated therewith; (b) presenting the probabilistic output result and the associated confidence information to the user via a business system user interface of the business information and decisioning control system; and (c)*

receiving the user's selection of a command via the business system user interface, where the command prompts at least one of the interrelated business processes to make a change in the at least one of the interrelated business processes. The user chooses the command based on an analysis of both the probabilistic output result and its associated confidence information).

As per claim 19, Johnson, as combined, teaches the method of claim 18, further comprising optimizing said business process based on said comparing *(i.e. [0007] According to one exemplary implementation, a method is described for visualizing a probabilistic output result generated by a business information and decisioning control system for a business including multiple interrelated business processes. The method includes: (a) performing analysis using a business model provided by the business information and decisioning control system to generate a probabilistic output result, the probabilistic output result having confidence information associated therewith; (b) presenting the probabilistic output result and the associated confidence information to the user via a business system user interface of the business information and decisioning control system; and (c) receiving the user's selection of a command via the business system user interface, where the command prompts at least one of the interrelated business processes to make a change in the at least one of the interrelated business processes. The user chooses the command based on an analysis of both the probabilistic output result and its associated confidence information)*.

As per claim 20, Johnson, as combined, teaches the method of claim 19, further comprising creating a business process model using said entity model and said work model, wherein said creating said business process model comprises constructing a flow chart, said flow chart having a work step, and said optimizing comprising substituting said work step with a previously created work step *(i.e. [0007] According to one exemplary implementation, a method is described for visualizing a probabilistic output result generated by a business information and decisioning control system for a business including multiple interrelated business processes. The method includes: (a) performing analysis using a business model provided by the business information and decisioning control system to generate a probabilistic output result, the probabilistic output result having confidence information associated therewith; (b) presenting the probabilistic output result and the associated confidence information to the user via a business system user interface of the business information and decisioning control system; and (c) receiving the user's selection of a command via the business system user interface, where the command prompts at least one of the interrelated business processes to make a change in the at least one of the interrelated business processes. The user chooses the command based on an analysis of both the probabilistic output result and its associated confidence information)*.

As per claim 21, Johnson, as combined, teaches the method of claim 19, wherein said optimizing comprises substituting said work model with a previously

created work model *(i.e. [0007] According to one exemplary implementation, a method is described for visualizing a probabilistic output result generated by a business information and decisioning control system for a business including multiple interrelated business processes. The method includes: (a) performing analysis using a business model provided by the business information and decisioning control system to generate a probabilistic output result, the probabilistic output result having confidence information associated therewith; (b) presenting the probabilistic output result and the associated confidence information to the user via a business system user interface of the business information and decisioning control system; and (c) receiving the user's selection of a command via the business system user interface, where the command prompts at least one of the interrelated business processes to make a change in the at least one of the interrelated business processes. The user chooses the command based on an analysis of both the probabilistic output result and its associated confidence information)*.

As per claim 22, Johnson, as combined, teaches the method of claim 19, further comprising adopting said optimized business process as a standard *(i.e. [0007] According to one exemplary implementation, a method is described for visualizing a probabilistic output result generated by a business information and decisioning control system for a business including multiple interrelated business processes. The method includes: (a) performing analysis using a business model provided by the business information and decisioning control system to generate*

a probabilistic output result, the probabilistic output result having confidence information associated therewith; (b) presenting the probabilistic output result and the associated confidence information to the user via a business system user interface of the business information and decisioning control system; and (c) receiving the user's selection of a command via the business system user interface, where the command prompts at least one of the interrelated business processes to make a change in the at least one of the interrelated business processes. The user chooses the command based on an analysis of both the probabilistic output result and its associated confidence information).

As per claim 33, Leisten, as combined, teaches the computer product of claim 32, wherein said process further comprises providing a work template representative of a task which can be assigned to said entity *(i.e. Composite tasks have to be refined into simple executable tasks before actual start of task execution. Simple tasks need to be allocated to a unique user-id or team-id, col. 5, lines 25-33; people performing these tasks in different roles. Each individual user role exercises a different view over the work process, where the different views comprise different, partly overlapping functions over a work process, col. 3, lines 22-27)*.

As per claim 34, Leisten, as combined, teaches the computer product of claim 33, wherein said process further comprises assigning said task to said entity *(i.e. Composite tasks have to be refined into simple executable tasks*

before actual start of task execution. Simple tasks need to be allocated to a unique user-id or team-id, col. 5, lines 25-33; people performing these tasks in different roles. Each individual user role exercises a different view over the work process, where the different views comprise different, partly overlapping functions over a work process, col. 3, lines 22-27).

As per claim 37, Leisten, as combined, teaches the computer product of claim 36, wherein said process further comprises providing a user interface for allowing a user to creating a work model representative of a task that can be assigned to said entity *(i.e. A work process object (WPO) (1001) is created, residing in a data base, and stored in a memory of the process and project management computer system (1030). All data concerning the process and project management are reported to said work process object (WPO) (1001) and said work process object (WPO) (1001) is used as a common data base, Abstract)*.

As per claim 38, Leisten, as combined, teaches the computer of claim 37, wherein said process further comprises assigning said task to said entity *(i.e. Composite tasks have to be refined into simple executable tasks before actual start of task execution. Simple tasks need to be allocated to a unique user-id or team-id, col. 5, lines 25-33; people performing these tasks in different roles. Each individual user role exercises a different view over the work process, where the*

different views comprise different, partly overlapping functions over a work process, col. 3, lines 22-27).

As per claim 47, Leisten, as combined, teaches the system of claim 46, further comprising a business process analysis and optimization module for optimizing a business process based on data collected *(i.e. The present invention discloses a work process object (WPO) recording all data from the process schema through the execution of the last task in a project, col. 7, line 61 to col. 8, line 4)* form execution of said one or more tasks *(i.e. Of course his work is guided by control documents, the building plan as visible in the task chart shown in FIG. 6, but it is his responsibility to perform his work according to his professional skills, interpreting the building plan as visible in the task chart shown in FIG. 6. The process will contain elements of checking that work is executed according to plans, in this example summarized in the final usage permits UPEs 304.1 and 304.2 for the completed houses. In a real project of course many more checks will be imbedded in the process in order to detect deviations from the building plan as visible in the task chart shown in FIG. 6 early enough to avoid accumulation of later error correction through re-work, col. 19, line 51 col. 20, line 4)*.

As per claim 48, Leisten, as combined, teaches the system of claim 46, further comprising a business process simulation module for checking said business process model for errors *(i.e. In exceptional cases a domain boundary*

may have to be reset upwards, for necessary rework, reediting or error correction in a previously completed partition. It will be an explicit decision by the person executing a view dialogue, where to place the domain boundary, declaring a partition completed, col. 8, lines 23-40).

As per claim 54, Johnson, as combined, teaches the method of claim 53, wherein said entity model comprises information regarding a work efficiency of said entity *(i.e. [0007] According to one exemplary implementation, a method is described for visualizing a probabilistic output result generated by a business information and decisioning control system for a business including multiple interrelated business processes. The method includes: (a) performing analysis using a business model provided by the business information and decisioning control system to generate a probabilistic output result, the probabilistic output result having confidence information associated therewith; (b) presenting the probabilistic output result and the associated confidence information to the user via a business system user interface of the business information and decisioning control system; and (c) receiving the user's selection of a command via the business system user interface, where the command prompts at least one of the interrelated business processes to make a change in the at least one of the interrelated business processes. The user chooses the command based on an analysis of both the probabilistic output result and its associated confidence information)*.

As per claim 57, Leisten, as combined, teaches the method of claim 53, wherein said entity model is obtained by selecting an entity template *(i.e. In the following the term "resource" will be used to denote the unique personnel resource, either a person or a team assigned to the same task, col. 18, lines 6-21)* of available entity templates *(i.e. the application of resources, as building teams, col. 15, lines 50-60)*.

As per claim 59, Johnson, as combined, teaches the system of claim 58, wherein said entity model comprises information regarding a work efficiency of said entity *(i.e. [0007] According to one exemplary implementation, a method is described for visualizing a probabilistic output result generated by a business information and decisioning control system for a business including multiple interrelated business processes. The method includes: (a) performing analysis using a business model provided by the business information and decisioning control system to generate a probabilistic output result, the probabilistic output result having confidence information associated therewith; (b) presenting the probabilistic output result and the associated confidence information to the user via a business system user interface of the business information and decisioning control system; and (c) receiving the user's selection of a command via the business system user interface, where the command prompts at least one of the interrelated business processes to make a change in the at least one of the interrelated business processes. The user chooses the command based on an*

analysis of both the probabilistic output result and its associated confidence information)

As per claim 60, Johnson, as combined, teaches the system of claim 58, wherein said processor is configured for obtaining said entity model by providing a user interface for allowing a user to input data regarding said entity *(i.e. [0007] According to one exemplary implementation, a method is described for visualizing a probabilistic output result generated by a business information and decisioning control system for a business including multiple interrelated business processes. The method includes: (a) performing analysis using a business model provided by the business information and decisioning control system to generate a probabilistic output result, the probabilistic output result having confidence information associated therewith; (b) presenting the probabilistic output result and the associated confidence information to the user via a business system user interface of the business information and decisioning control system; and (c) receiving the user's selection of a command via the business system user interface, where the command prompts at least one of the interrelated business processes to make a change in the at least one of the interrelated business processes. The user chooses the command based on an analysis of both the probabilistic output result and its associated confidence information)*.

Response to Arguments

Applicant's arguments filed 03/31/09 have been fully considered but they are not persuasive.

1. Claim 29, Charisius and Johnson, as combined, teaches obtaining data regarding a result of a performance of said task, and comparing said data with data regarding a result of a previously performed task for a previously created business process.

Notably, the claim recites: " comparing **data with data** regarding a result of a previously performed task".

The claim does not specify that "comparing the current generated the business process result with the previous generated said business process result.

Charisius teaches the data regarding a result of a previously performed task as a skill of the resource-most-often-assigned, col. 44, lines 15-25.

Charisius teaches the step of comparing in col. 44, lines 15-25 *(i.e. In another implementation, the Client Interface 134 may compare a skill of the resource-most-often-assigned (e.g., "MG") to the skills in role profiles other than "Assembler" role profile 7604 in order to identify an optimal role that may be assigned to responsible role 6806 for activity 6801. For example, the Client Interface 134 may compare skill 7710 of "MG" resource profile 7704 to skills 7622 and 7624 of role profiles 7606 and 7608, respecively. In this example, the Client Interface 134 is able to identify that skill 7622 of role profile 7606 matches*

skill 7624 of role profile 7608 corresponding to "Gopher" role 7620, col. 44, lines 15-25).

The step of comparing the current generated result with the previous generated result is taught by the new cited reference, Johnson.

2. Leisten also does disclose or suggest that the proposed change is based on information regarding a result of an activity performed by an entity.

Leisten *implicitly teaches the step of proposed change as (i.e. one dynamically changing work process object (WPO) represents a work process at its various points of definition and execution, and that several well defined views support the mapping between the stages of the work process object (WPO), col. 5, lines 1-11)*, (*This is the case in the current example for all planning and monitoring activities where the result is directly entered into the work process object (WPO)*. But many of the activities in the current example relate to manual work. The instruction about tasks and activities and all their execution attributes will be handed to the executing persons in the form of a work order, for example in a printed form. *The person receiving a work order must return the information to the system on the acceptance of the work order*, as to instruct the project management function about the start of the execution of the task, and has to report back to the system work progress and work termination, included some measurement parameters like total effort spent on a specific task, or reasons for deviation, col. 23, lines 20-36).

This limitation is specifically taught by the new cited reference, Johnson.

3. Claims 1-22, 32-39, 46-50, 52, 54, 57, 59, and 60 – work efficiency of said entity/person.

Charisius teaches work efficiency as a skill of the resource-mos-often-assigned in col. 44, lines 15-25 *(i.e. In another implementation, the Client Interface 134 may compare a skill of the resource-most-often-assigned (e.g., "MG") to the skills in role profiles other than "Assembler" role profile 7604 in order to identify an optimal role that may be assigned to responsible role 6806 for activity 6801. For example, the Client Interface 134 may compare skill 7710 of "MG" resource profile 7704 to skills 7622 and 7624 of role profiles 7606 and 7608, respecively. In this example, the Client Interface 134 is able to identify that skill 7622 of role profile 7606 matches skill 7624 of role profile 7608 corresponding to "Gopher" role 7620, col. 44, lines 15-25).*

This limitation is also taught by the new cited reference, Johnson.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is

filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Miranda Le whose telephone number is (571) 272-4112. The examiner can normally be reached on Monday through Friday from 10:00 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James K. Trujillo, can be reached at (571) 272-3677. The fax number to this Art Unit is (571)-273-8300.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (571) 272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Miranda Le/
Primary Examiner, Art Unit 2159